Amendments to the Specification:

Please replace paragraph **[0013]** with the following amended paragraph:

[0013] This invention also relates to a polymer comprising one or more C3 to C40 olefins where the polymer has:

a) a Dot T-Peel of 1 Newton or more on Kraft paper;

b) a branching index (g') of 0.95 or less measured at the Mz of the polymer;

c) a Mw of 10,000 to 100,000; and

d) a heat of fusion of 1 to 70 J/g.

Please replace paragraph **[0041]** with the following amended paragraph:

[0041] In some embodiments the polymers described above ~~has~~ have a slope of -0.1 or less, preferably -0.15 or less, more preferably -0.25 or less in the trace of complex viscosity versus temperature as shown in Figure 1 (as measured by ARES dynamic mechanical spectrometer operating at a frequency of 10 rad/s, with a strain of 20 % under a nitrogen atmosphere, and a cooling rate of 10°C/min) over the range of temperatures from Tc +10 °C to Tc+40 °C. The slope is defined as a derivative of log (complex viscosity) with respect to temperature.

Please replace paragraph **[00324]** with the following amended paragraph:

[00324] Seven samples were made with dimethylsilylbis(indenyl)hafnium dimethyl and dimethylsilyl(tetramethylcyclopentadienyl)(cyclododecylamido)titanium dimethyl at a catalyst ~~ratio~~ mix of about 80.0 molar percent over a range of temperatures. The polymerization reactions followed the general procedure described above. The detailed experimental conditions and results are presented in Table 3. The data show that temperature has appreciable effects on crystallinity, Mw, Mw/Mn, and level of branching. The population can also be manipulated through reaction temperatures since the reaction kinetics of each catalyst has unique response to polymerization temperatures.

Please replace paragraph **[00327]** with the following amended paragraph:

[00327] Five samples were made with dimethylsilylbis (indenyl) hafnium dimethyl and dimethylsilyl(tetramethylcyclopentadienyl)(cyclododecylamido)titanium dimethyl at a catalyst ~~ratio~~ mix of 75 mol.% and over a range of temperatures from 85 to 105°C, following the general procedure described above with the exception that a small quantity of 1,9-decadiene was fed as the diolefin monomer along with propylene as the alpha-olefin monomer. The detailed experimental conditions and results are presented in Table 7.

Please replace paragraph **[00330]** with the following amended paragraph:

[00330] Four samples were made with rac-dimethylsilylbis(2-methylindenyl)zirconium dimethyl and dimethylsilyl(tetramethylcyclopentadienyl)(cyclododecylamido)titanium dimethyl at a temperature of 80°C and over a range of catalyst ~~ratios~~ from 74 to 84 mol.%, following the general procedure described above with the exception that a small quantity of 1,9-decadiene was fed as the diolefin monomer along with propylene as the alpha-olefin monomer. The detailed experimental conditions and results are presented in Table 10.

Please replace paragraph **[00331]** with the following amended paragraph:

[00331] Six samples were made with rac-dimethylsilylbis(2-methyl-4-phenylindenyl)zirconium dimethyl and dimethylsilyl-(tetramethylcyclopentadienyl)(cyclododecylamido)titanium dimethyl at a temperature range of 80 to 95°C and a catalyst ~~ratio of about 87~~ mix of about 58 molar percent, following the general procedure described above with the exception that (1) a small quantity of 1,9-decadiene was fed as the diolefin monomer along with propylene as the alpha-olefin monomer; (2) A small amount of hydrogen was also fed in the reactor. The detailed experimental conditions and results are presented in Table 11. Examples 52-57 show that addition of hydrogen can effectively manipulate Mw, Mw/Mn, crystallinity, the ratio of crystalline phase to the amorphous phase, in addition to the control obtained through catalyst selections and process conditions such as temperatures.

Please replace paragraph **[00333]** with the following amended paragraph:

[00333] Six samples were made with dimethylsilylbis (2-methyl-4-phenylindenyl) zirconium dimethyl and dimethylsilyl(tetramethylcyclopentadienyl) (cyclododecylamido) titanium dimethyl at a temperature range of 105 to 130 °C and a catalyst ~~ratio of about 84.6~~ mix of about 35.6 molar percent, following the general procedure described above with the following exceptions: (1) a small quantity of 1,9-decadiene was fed as the diolefin monomer; (2) ethylene was added to the reactor. The detailed experimental conditions and results are presented in Table 13. Ethylene content in the polymer was obtained from by Fourier Transformation Infrared analysis (FTIR).

Support for Amendment to the Specification

The amending language is now consistent with the data in the tables accompanying each amended example and removes the confusing term "ratio". Further explanation concerning the precatalyst and catalyst portions and preparations are provided in paragraphs [00213] and [00214].